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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/423,207	11/03/1999	THORBJORN ANDERSSON	027650-836	6484

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[REDACTED] EXAMINER

PATTERSON, MARC A

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

1772

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/423,207	ANDERSSON ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Marc A Patterson	1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 May 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3 and 4 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### WITHDRAWN REJECTIONS

1. The 35 U.S.C. 103(a) as being unpatentable over Kohn et al. (U.S. Patent No. 5,819,991) in view of Nakagawa et al (U.S. Patent No. 4,907,957), of record on page 2 of the previous Action, is withdrawn.

### NEW REJECTIONS

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 – 2 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to Claim 1, the phrase ‘mixing ratio’ is indefinite as it is unclear if the phrase refers to a weight ratio or to some other ratio. For purposes of examination, it will be assumed that the phrase refers to a weight ratio.

#### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Heider (U.S. Patent 5,405,667).

With regard to Claim 1, Heider discloses a bottle (column 3, lines 1 – 14) having a wall structure (bonded label; column 2, lines 32 – 42); comprising an intermediate layer of foamed plastic (cellular plastic; column 2, lines 32 – 42) and outer solid layers of plastic (non cellular plastic; column 2, lines 32 – 42) wherein the plastic of the foamed intermediate layer is a mixture of a first polymer component comprising high density polyethylene and a second polymer component comprising low density polyethylene (column 4, lines 32 – 57); the high density polyethylene is more rigid than the low density polyethylene (column 3, lines 32 – 45); the plastic of the outer layers is the same as the more rigid plastic of the intermediate layer (column 4, lines 32 – 57). With regard to the claimed aspect of the weight ratio of the first component to the second component being between 1:3 and 3:1, Heider teaches a mixture of high and low density polyethylene (column 4, lines 32 – 57); a weight ratio of high to low density polyethylene of 1:1, and therefore a weight ratio of the first component to the second component of between 1:3 and 3:1, therefore reads on Heider.

With regard to Claim 4, the outer layers have substantially the same thicknesses (column 2, lines 50 – 56).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heider (U.S. Patent 5,405,667).

Heider discloses a bottle having plastic layers as discussed above. Heider fails to disclose a bottle in which the foamed layer takes up between 50 and 100% of the total weight of the wall material, while the two outer plastic layers together take up between 0 and 50% of the total weight of the wall material. However, Heider discloses a bottle in which the layers have a total thickness of 6 mil, and the outer layers have a total thickness of 1 mil (column 2, lines 57 – 64). Therefore, the thickness percent taken up by the outer layers, and therefore the weight percent taken up by the outer layers, would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the weight percent taken up by the outer layers, since the weight percent taken up by the outer layers would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Heider. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

#### ANSWERS TO APPLICANT'S ARGUMENTS

8. Applicant's arguments regarding the 35 U.S.C. 103(a) as being unpatentable over Kohn et al. (U.S. Patent No. 5,819,991) in view of Nakagawa et al (U.S. Patent No. 4,907,957), of record on page 2 of the previous Action, have been considered and have been found to be persuasive. The rejections are therefore withdrawn. The new 35 U.S.C. 102(b) rejection of Claims 1 and 4 as being anticipated by Heider (U.S. Patent 5,405,667) and 35 U.S.C. 103(a)

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rejection of Claim 3 as being unpatentable over Heider (U.S. Patent 5,405,667) above are directed to amended Claims 1 and 3 – 4.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (703) 305-3537. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (703) 308-4251. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

*Marc Patterson*  
Art Unit 1772

*Harold Pyon*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1772* 6/4/03